FIG. 1

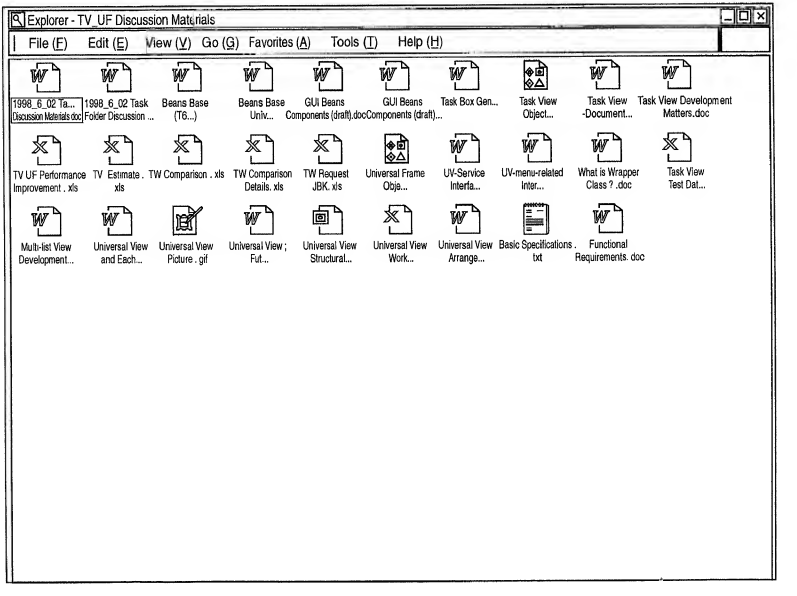

Explorer - TV_UF Discussion Materials
File (F) Edit (E) View (V) Go (G) Favorites (A) Tools (T) Help (H)
1998_6_02 Ta... Discussion Materials.doc
1998_6_02 Task Folder Discussion ...
Beans Base (T6...)
Beans Base Univ...
GUI Beans Components (draft).doc
GUI Beans Components (draft)...
Task Box Gen...
Task View Object...
Task View -Document...
Task View Development Matters.doc
TV UF Performance Improvement . xls
TV Estimate . xls
TW Comparison . xls
TW Comparison Details. xls
TW Request JBK. xls
Universal Frame Obja...
UV-Service Interfa...
UV-menu-related Inter...
What is Wrapper Class ? .doc
Task View Test Dat...
Multi-list View Development...
Universal View and Each...
Universal View Picture . gif
Universal View ; Fut...
Universal View Structural...
Universal View Work...
Universal View Arrange...
Basic Specifications . txt
Functional Requirements. doc

FIG. 2

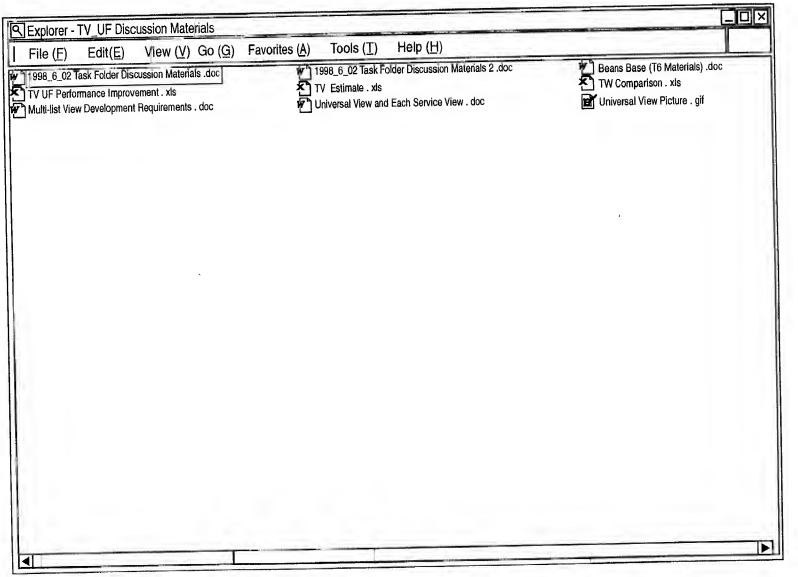

Explorer - TV_UF Discussion Materials
File (F) Edit(E) View (V) Go (G) Favorites (A) Tools (T) Help (H)
1998_6_02 Task Folder Discussion Materials .doc
TV UF Performance Improvement . xls
Multi-list View Development Requirements . doc
1998_6_02 Task Folder Discussion Materials 2 .doc
TV_Estimate . xls
Universal View and Each Service View . doc
Beans Base (T6 Materials) .doc
TW Comparison . xls
Universal View Picture . gif

FIG. 3

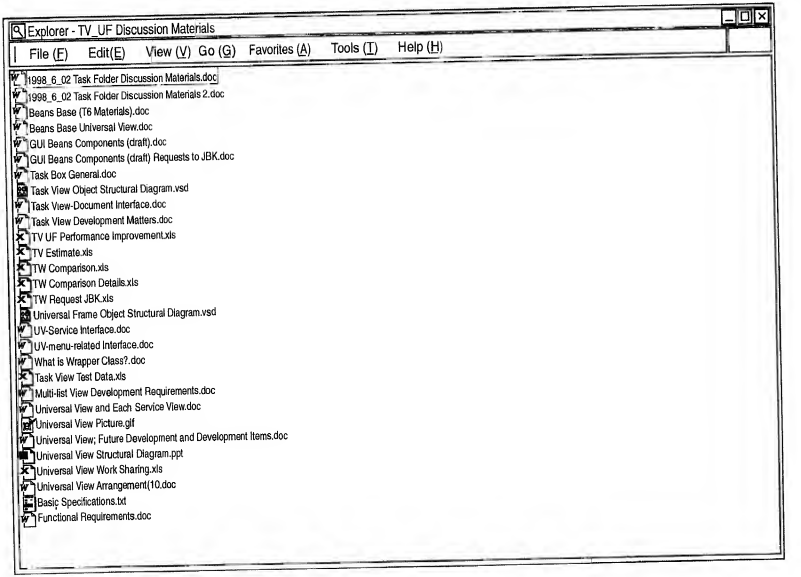

Explorer - TV_UF Discussion Materials
File (F) Edit(E) View (V) Go (G) Favorites (A) Tools (T) Help (H)
1998_6_02 Task Folder Discussion Materials.doc
1998_6_02 Task Folder Discussion Materials 2.doc
Beans Base (T6 Materials).doc
Beans Base Universal View.doc
GUI Beans Components (draft).doc
GUI Beans Components (draft) Requests to JBK.doc
Task Box General.doc
Task View Object Structural Diagram.vsd
Task View-Document Interface.doc
Task View Development Matters.doc
TV UF Performance Improvement.xls
TV Estimate.xls
TW Comparison.xls
TW Comparison Details.xls
TW Request JBK.xls
Universal Frame Object Structural Diagram.vsd
UV-Service Interface.doc
UV-menu-related Interface.doc
What is Wrapper Class?.doc
Task View Test Data.xls
Multi-list View Development Requirements.doc
Universal View and Each Service View.doc
Universal View Picture.gif
Universal View; Future Development and Development Items.doc
Universal View Structural Diagram.ppt
Universal View Work Sharing.xls
Universal View Arrangement(10.doc
Basic Specifications.txt
Functional Requirements.doc

FIG. 4

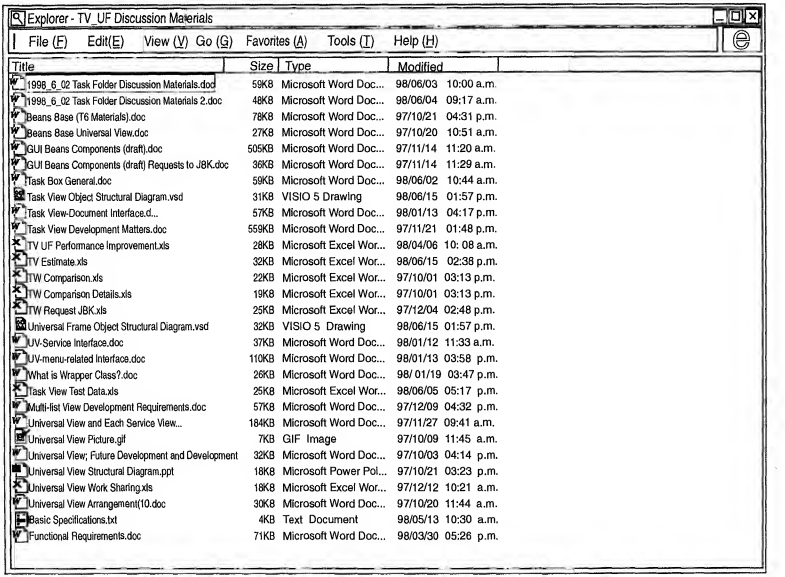

Explorer - TV_UF Discussion Materials
File (F) Edit(E) View (V) Go (G) Favorites (A) Tools (T) Help (H)
Title Size Type Modified
1998_6_02 Task Folder Discussion Materials.doc 59KB Microsoft Word Doc... 98/06/03 10:00 a.m.
1998_6_02 Task Folder Discussion Materials 2.doc 48KB Microsoft Word Doc... 98/06/04 09:17 a.m.
Beans Base (T6 Materials).doc 78KB Microsoft Word Doc... 97/10/21 04:31 p.m.
Beans Base Universal View.doc 27KB Microsoft Word Doc... 97/10/20 10:51 a.m.
GUI Beans Components (draft).doc 505KB Microsoft Word Doc... 97/11/14 11:20 a.m.
GUI Beans Components (draft) Requests to JBK.doc 36KB Microsoft Word Doc... 97/11/14 11:29 a.m.
Task Box General.doc 59KB Microsoft Word Doc... 98/06/02 10:44 a.m.
Task View Object Structural Diagram.vsd 31KB VISIO 5 Drawing 98/06/15 01:57 p.m.
Task View-Document Interface.d... 57KB Microsoft Word Doc... 98/01/13 04:17 p.m.
Task View Development Matters.doc 559KB Microsoft Word Doc... 97/11/21 01:48 p.m.
TV UF Performance Improvement.xls 28KB Microsoft Excel Wor... 98/04/06 10: 08 a.m.
TV Estimate.xls 32KB Microsoft Excel Wor... 98/06/15 02:38 p.m.
TW Comparison.xls 22KB Microsoft Excel Wor... 97/10/01 03:13 p.m.
TW Comparison Details.xls 19KB Microsoft Excel Wor... 97/10/01 03:13 p.m.
TW Request JBK.xls 25KB Microsoft Excel Wor... 97/12/04 02:48 p.m.
Universal Frame Object Structural Diagram.vsd 32KB VISIO 5 Drawing 98/06/15 01:57 p.m.
UV-Service Interface.doc 37KB Microsoft Word Doc... 98/01/12 11:33 a.m.
UV-menu-related Interface.doc 110KB Microsoft Word Doc... 98/01/13 03:58 p.m.
What is Wrapper Class?.doc 26KB Microsoft Word Doc... 98/ 01/19 03:47 p.m.
Task View Test Data.xls 25KB Microsoft Excel Wor... 98/06/05 05:17 p.m.
Multi-list View Development Requirements.doc 57KB Microsoft Word Doc... 97/12/09 04:32 p.m.
Universal View and Each Service View... 184KB Microsoft Word Doc... 97/11/27 09:41 a.m.
Universal View Picture.gif 7KB GIF Image 97/10/09 11:45 a.m.
Universal View; Future Development and Development 32KB Microsoft Word Doc... 97/10/03 04:14 p.m.
Universal View Structural Diagram.ppt 18KB Microsoft Power Pol... 97/10/21 03:23 p.m.
Universal View Work Sharing.xls 18KB Microsoft Excel Wor... 97/12/12 10:21 a.m.
Universal View Arrangement(10.doc 30KB Microsoft Word Doc... 97/10/20 11:44 a.m.
Basic Specifications.txt 4KB Text Document 98/05/13 10:30 a.m.
Functional Requirements.doc 71KB Microsoft Word Doc... 98/03/30 05:26 p.m.

FIG. 5

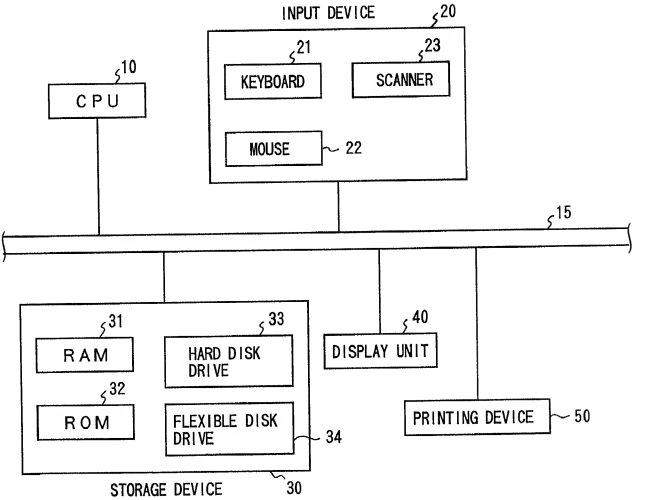

INPUT DEVICE
20
21
23
10
CPU
KEYBOARD
SCANNER
MOUSE
22
15
31
33
40
RAM
HARD DISK DRIVE
DISPLAY UNIT
32
ROM
FLEXIBLE DISK DRIVE
34
PRINTING DEVICE
50
STORAGE DEVICE
30

FIG. 6

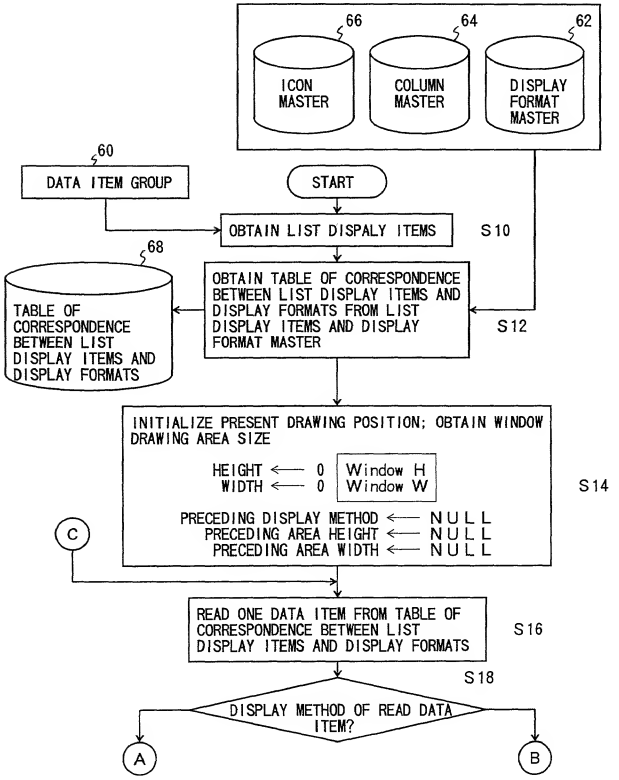

66
64
62
ICON MASTER
COLUMN MASTER
DISPLAY FORMAT MASTER
60
DATA ITEM GROUP
START
OBTAIN LIST DISPALY ITEMS
S10
68
TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS
OBTAIN TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS FROM LIST DISPLAY ITEMS AND DISPLAY FORMAT MASTER
S12
INITIALIZE PRESENT DRAWING POSITION; OBTAIN WINDOW DRAWING AREA SIZE
HEIGHT ⟵ 0
WIDTH ⟵ 0
Window H
Window W
S14
PRECEDING DISPLAY METHOD ⟵ NULL
PRECEDING AREA HEIGHT ⟵ NULL
PRECEDING AREA WIDTH ⟵ NULL
C
READ ONE DATA ITEM FROM TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS
S16
S18
DISPLAY METHOD OF READ DATA ITEM?
A
B

FIG. 7

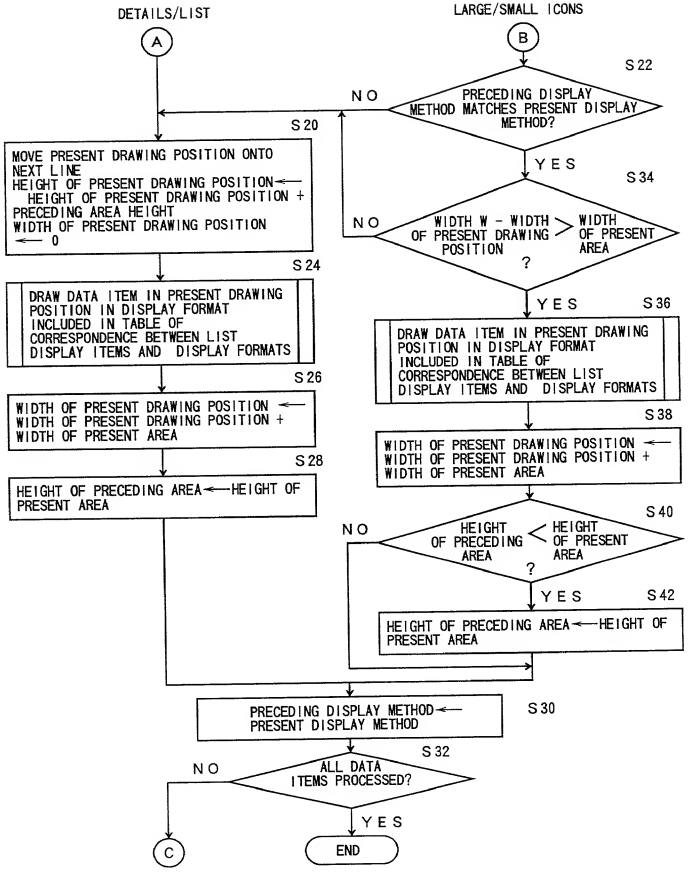

DETAILS/LIST
A
LARGE/SMALL ICONS
B
S22
PRECEDING DISPLAY METHOD MATCHES PRESENT DISPLAY METHOD?
NO
YES
S20
MOVE PRESENT DRAWING POSITION ONTO NEXT LINE
HEIGHT OF PRESENT DRAWING POSITION ← HEIGHT OF PRESENT DRAWING POSITION + PRECEDING AREA HEIGHT
WIDTH OF PRESENT DRAWING POSITION ← 0
S34
NO
WIDTH W - WIDTH OF PRESENT DRAWING POSITION > WIDTH OF PRESENT AREA ?
YES
S24
DRAW DATA ITEM IN PRESENT DRAWING POSITION IN DISPLAY FORMAT INCLUDED IN TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS
S36
DRAW DATA ITEM IN PRESENT DRAWING POSITION IN DISPLAY FORMAT INCLUDED IN TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS
S26
WIDTH OF PRESENT DRAWING POSITION ← WIDTH OF PRESENT DRAWING POSITION + WIDTH OF PRESENT AREA
S38
WIDTH OF PRESENT DRAWING POSITION ← WIDTH OF PRESENT DRAWING POSITION + WIDTH OF PRESENT AREA
S28
HEIGHT OF PRECEDING AREA ← HEIGHT OF PRESENT AREA
S40
NO
HEIGHT OF PRECEDING AREA < HEIGHT OF PRESENT AREA ?
YES
S42
HEIGHT OF PRECEDING AREA ← HEIGHT OF PRESENT AREA
PRECEDING DISPLAY METHOD ← PRESENT DISPLAY METHOD
S30
S32
NO
ALL DATA ITEMS PROCESSED?
YES
C
END

FIG. 8

(A)

ATTRIBUTE	FIRST ITEM	SECOND ITEM	THIRD ITEM	FOURTH ITEM
MAIL	(seq 1) Mailing list has been opened.	1998/ 4/30(Th.) 10:32:21	Yoko Kobayashi	jave-grp@prs.cs.fujitsu.co.jp
TO DO	Progress meeting every Monday. Prepare materials on progress.	1998/ 4/30(Th.) 11:42:11	1998/6/30(Fr.)	
CALENDER	Progress meeting	1998/ 5/10(Sun.)13:45:71	1998/5/22(Mon.)10:00	1998/5/22(Mon.)16:00
FORUM	Objection to the Task View concept.	1998/ 4/31(Fr.) 12:25:45	Wu WuWu	Task View Forum
ADDRESS	Toshiyuki Chisaka	1998/ 4/20(Mon.)16:30:10	7128-4335	Project Manager, MW Third Development Dept.
MAIL	(seq 2) RE: Mailing list has been opened.	1998/ 4/30(Th.) 10:40:10	Naoto Kiriyama	jave-grp@prs.cs.fujitsu.co.jp
MEMO	Storage area of prior art search system	1998/ 4/30(Th.) 11:25:45		
FORUM	Specification form	1997/12/10(Mon.)09:40:10	Wu WuWu	Patent Forum

(B)

FIFTH ITEM	CONTENT ITEM
Read	To the members of the Korean Food Research Project: Mailing list has been opened. Let's use it. ¥n
	Prepare materials on progress as the progress meeting is held every Monday.
SSC Meeting Room	A meeting room for the progress meeting has been reserved. Please attend the meeting.
	I do not understand some part of the Task View basic concept, so please give me a comment.
Shinmaruko1-1-1	Manager working on the fourth floor of the SSC Building.
Unread	OK. Thank you for your mail. ¥nBy KIRIYAMA
	Please checck ¥¥KOUT1 of the server.
	I have made a specification.

FIG. 9

DISPLAY FORMAT NAME	DISPLAY METHOD	ICON NO.	COLUMN NAME	FONT	FONT SIZE	FONT COLOR	CONTENT DISPLAY	DISPLAY CONDITIONS	AREA SIZE OF DATA ITEM
MAIL FORMAT 1	DETAILS	1	MAIL COLUMN	MINCHO/ BOLD	11	BLACK	NO	ATTRIBUTE=MAIL AND STATE=READ	H20×W1000
MAIL FORMAT 2	DETAILS	1	MAIL COLUMN	MINCHO/ BOLD	11	BLACK	YES	ATTRIBUTE=MAIL AND STATE=UNREAD	H80×W1000
TO DO FORMAT	DETAILS	2	TO DO COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=TO DO	H20×W800
CALENDAR FORMAT	DETAILS	3	CALENDAR COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=CALENDER	H20×W1300
FORUM FORMAT①	DETAILS	4	FORUM COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=FORUM AND WRITING TIME≧1998/1/1	H20×W1150
FORUM FORMAT②	LIST	15	FORUM COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=FORUM AND WRITING TIME<1998/1/1	H20×W1150
MEMO FORMAT	LARGE ICONS	6	MEMO COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=MEMO	H60×W60
ADDRESS FORMAT	SMALL ICONS	5	ADDRESS COLUMN	GOTHIC	11	BLACK	NO	ATTRIBUTE=ADDRESS	H20×W200

FIG. 10

(A)

COLUMN NAME	FIRST COLUMN			SECOND COLUMN		
	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH
MAIL COLUMN	7	TITLE	400	15	RECEPTION DATA AND TIME	200
TO DO COLUMN	2	SCHEDULE	400	12	WRITING DATE AND TIME	200
CALENDAR COLUMN	9	HEADING	400	12	WRITING DATE AND TIME	200
FORUM COLUMN	4	HEADING	400	12	WRITING TIME	200
MEMO COLUMN	6	MEMO	400	12	WRITING DATE AND TIME	200
ADDRESS COLUMN	5	NAME	200	12	ENTRY DATE AND TIME	200

(B)

THIRD COLUMN			FOURTH COLUMN			FIFTH COLUMN		
ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH
10	SENDER	200	NONE	ADDRESS	200			
NONE	EXPECTED COMPLETION DATE	200						
8	START TIME	250	8	FINISH TIME	250	13	PLACE	200
10	SENDER	200	11	FORUM NAME	350			
13	TITLE	200	15	PHONE NUMBER	200	16	ADDRESS	200

FIG.11

ICON NO.	ICON NAME
1	Mail
2	TODO
3	Calendar
4	Forum
5	Address
6	Memo
7	Subject
8	Watch
9	Bord
10	Human
11	Desk
12	Clock
13	Place
14	Name
15	Horse
16	Dog

FIG. 12

(A)

ATTRIBUTE	FIRST ITEM	SECOND ITEM	THIRD ITEM	FOURTH ITEM
MAIL	(seq 1) Mailing list has been opened.	1998/ 4/30 (Th.)	Yoko Kobayashi	jave-grp@prs.cs.fujitsu.co.jp
TO DO	Progress meeting every Monday. Prepare materials on progress.	1998/ 4/30 (Th.)	1998/6/30(Fr.)	
CALENDER	Progress meeting	1998/ 5/10 (Sun.)	1998/5/22(Mon.)10:00	1998/5/22(Mon.)16:00
FORUM	Objection to the Task View concept.	1998/ 4/31 (Fr.)	Wu WuWu	Task View Forum
ADDRESS	Toshiyuki Chisaka	1998/ 4/20 (Mon.)	7128-4335	Project Manager, MW Third Development Dept.
MAIL	(seq 2) RE: Mailing list has been opened.	1998/ 4/30 (Th.)	Naoto Kiriyama	jave-grp@prs.cs.fujitsu.co.jp
MEMO	Storage area of prior art search system	1998/ 4/30 (Th.)	11:25:45	
FORUM	Specification form	1997/12/10 (Mon.)	Wu WuWu	Patent Forum

(B)

FIFTH ITEM	CONTENT ITEM	DISPLAY FORMAT NAME
Read	To the members of the Korean Food Research Project: Mailing list has been opened. Let's use it. ¥n	MAIL FORMAT 1
	Prepare materials on progress as the progress meeting is held every Monday.	TO DO FORMAT
SSC Meeting Room	A meeting room for the progress meeting has been reserved. Please attend the meeting.	CALENDAR FORMAT
	I do not understand some part of the Task View basic concept, so please give me a comment.	FORUM FORMAT 1
Shinmaruko1-1-1	Manager working on the fourth floor of the SSC Building.	ADDRESS FORMAT
Unread	OK. Thank you for your mail. ¥nBy KIRIYAMA	MAIL FORMAT 2
	Please checck ¥¥KOUT1 of the server.	MEMO FORMAT
	I have made a specification.	FORUM FORMAT 2

FIG. 13

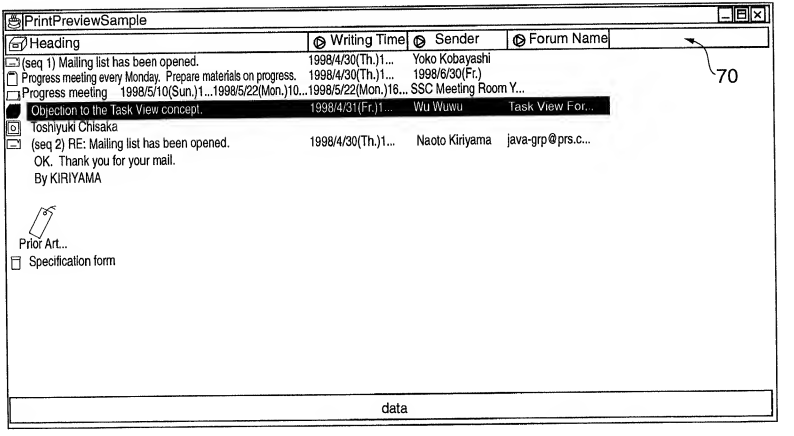

PrintPreviewSample
Heading
Writing Time
Sender
Forum Name
(seq 1) Mailing list has been opened. 1998/4/30(Th.)1... Yoko Kobayashi
Progress meeting every Monday. Prepare materials on progress. 1998/4/30(Th.)1... 1998/6/30(Fr.)
Progress meeting 1998/5/10(Sun.)1...1998/5/22(Mon.)10...1998/5/22(Mon.)16... SSC Meeting Room Y...
Objection to the Task View concept. 1998/4/31(Fr.)1... Wu Wuwu Task View For...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been opened. 1998/4/30(Th.)1... Naoto Kiriyama java-grp@prs.c...
OK. Thank you for your mail.
By KIRIYAMA
Prior Art...
Specification form
data
70

FIG. 14

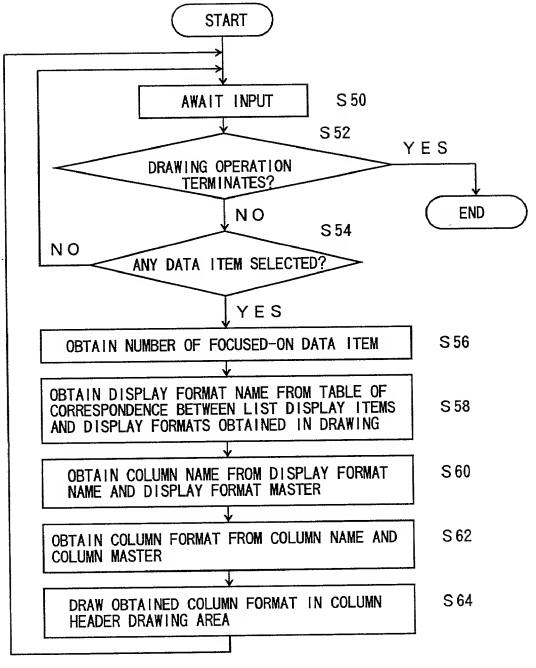

START
AWAIT INPUT
S50
S52
DRAWING OPERATION TERMINATES?
YES
END
NO
S54
NO
ANY DATA ITEM SELECTED?
YES
OBTAIN NUMBER OF FOCUSED-ON DATA ITEM
S56
OBTAIN DISPLAY FORMAT NAME FROM TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS OBTAINED IN DRAWING
S58
OBTAIN COLUMN NAME FROM DISPLAY FORMAT NAME AND DISPLAY FORMAT MASTER
S60
OBTAIN COLUMN FORMAT FROM COLUMN NAME AND COLUMN MASTER
S62
DRAW OBTAINED COLUMN FORMAT IN COLUMN HEADER DRAWING AREA
S64

FIG. 15

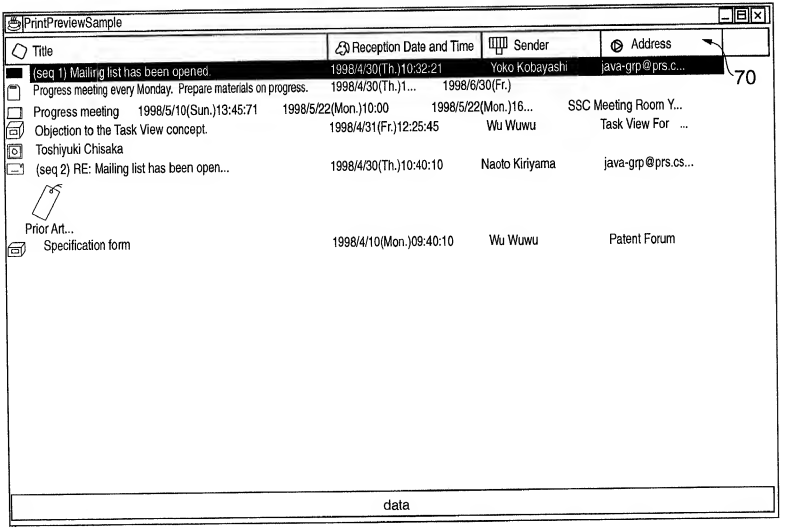

PrintPreviewSample
Title
Reception Date and Time
Sender
Address
(seq 1) Mailing list has been opened.
1998/4/30(Th.)10:32:21
Yoko Kobayashi
java-grp@prs.c...
70
Progress meeting every Monday. Prepare materials on progress.
1998/4/30(Th.)1...
1998/6/30(Fr.)
Progress meeting
1998/5/10(Sun.)13:45:71
1998/5/22(Mon.)10:00
1998/5/22(Mon.)16...
SSC Meeting Room Y...
Objection to the Task View concept.
1998/4/31(Fr.)12:25:45
Wu Wuwu
Task View For ...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been open...
1998/4/30(Th.)10:40:10
Naoto Kiriyama
java-grp@prs.cs...
Prior Art...
Specification form
1998/4/10(Mon.)09:40:10
Wu Wuwu
Patent Forum
data

FIG. 16

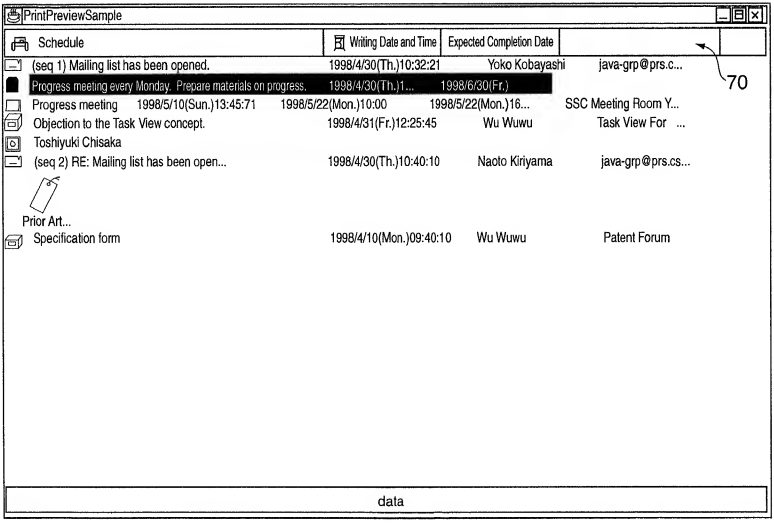

PrintPreviewSample
Schedule
Writing Date and Time
Expected Completion Date
(seq 1) Mailing list has been opened.
1998/4/30(Th.)10:32:21
Yoko Kobayashi
java-grp@prs.c...
Progress meeting every Monday. Prepare materials on progress.
1998/4/30(Th.)1...
1998/6/30(Fr.)
Progress meeting
1998/5/10(Sun.)13:45:71
1998/5/22(Mon.)10:00
1998/5/22(Mon.)16...
SSC Meeting Room Y...
Objection to the Task View concept.
1998/4/31(Fr.)12:25:45
Wu Wuwu
Task View For ...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been open...
1998/4/30(Th.)10:40:10
Naoto Kiriyama
java-grp@prs.cs...
Prior Art...
Specification form
1998/4/10(Mon.)09:40:10
Wu Wuwu
Patent Forum
data
70

FIG. 17

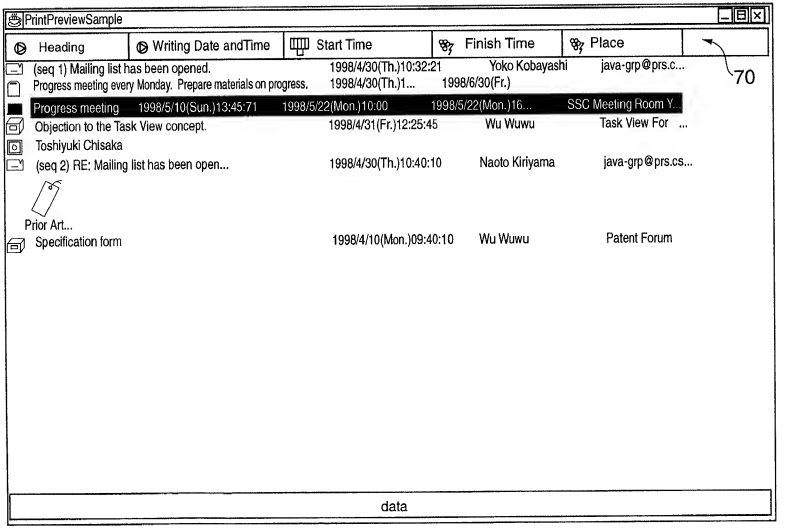

PrintPreviewSample
Heading
Writing Date andTime
Start Time
Finish Time
Place
(seq 1) Mailing list has been opened.
1998/4/30(Th.)10:32:21
Yoko Kobayashi
java-grp@prs.c...
Progress meeting every Monday. Prepare materials on progress.
1998/4/30(Th.)1...
1998/6/30(Fr.)
Progress meeting
1998/5/10(Sun.)13:45:71
1998/5/22(Mon.)10:00
1998/5/22(Mon.)16...
SSC Meeting Room Y...
Objection to the Task View concept.
1998/4/31(Fr.)12:25:45
Wu Wuwu
Task View For ...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been open...
1998/4/30(Th.)10:40:10
Naoto Kiriyama
java-grp@prs.cs...
Prior Art...
Specification form
1998/4/10(Mon.)09:40:10
Wu Wuwu
Patent Forum
data
70

FIG. 18

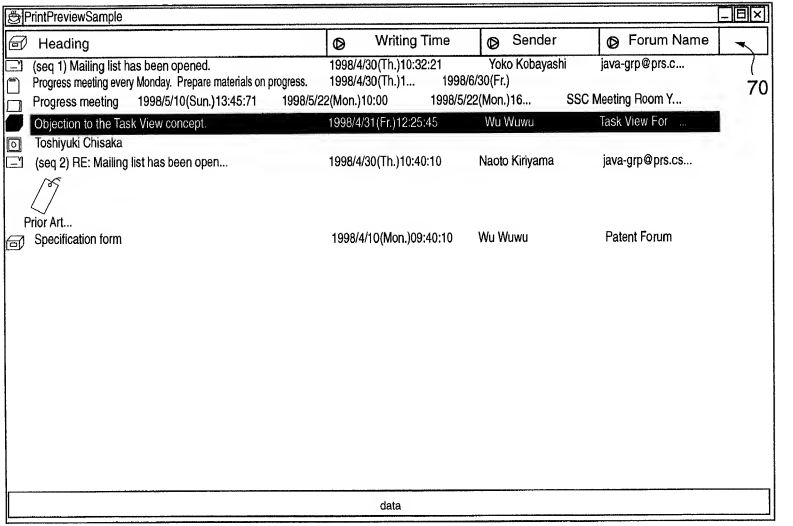

PrintPreviewSample
Heading
Writing Time
Sender
Forum Name
(seq 1) Mailing list has been opened.
1998/4/30(Th.)10:32:21
Yoko Kobayashi
java-grp@prs.c...
Progress meeting every Monday. Prepare materials on progress.
1998/4/30(Th.)1...
1998/6/30(Fr.)
Progress meeting
1998/5/10(Sun.)13:45:71
1998/5/22(Mon.)10:00
1998/5/22(Mon.)16...
SSC Meeting Room Y...
Objection to the Task View concept.
1998/4/31(Fr.)12:25:45
Wu Wuwu
Task View For ...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been open...
1998/4/30(Th.)10:40:10
Naoto Kiriyama
java-grp@prs.cs...
Prior Art...
Specification form
1998/4/10(Mon.)09:40:10
Wu Wuwu
Patent Forum
data
70

FIG. 19

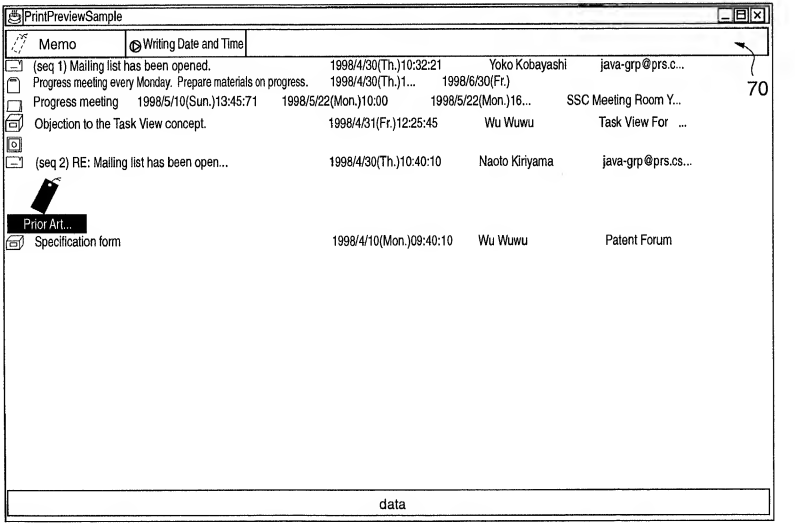

PrintPreviewSample
Memo
Writing Date and Time
(seq 1) Mailing list has been opened. 1998/4/30(Th.)10:32:21 Yoko Kobayashi java-grp@prs.c...
Progress meeting every Monday. Prepare materials on progress. 1998/4/30(Th.)1... 1998/6/30(Fr.)
Progress meeting 1998/5/10(Sun.)13:45:71 1998/5/22(Mon.)10:00 1998/5/22(Mon.)16... SSC Meeting Room Y...
Objection to the Task View concept. 1998/4/31(Fr.)12:25:45 Wu Wuwu Task View For ...
(seq 2) RE: Mailing list has been open... 1998/4/30(Th.)10:40:10 Naoto Kiriyama java-grp@prs.cs...
Prior Art...
Specification form 1998/4/10(Mon.)09:40:10 Wu Wuwu Patent Forum
data
70

FIG. 20

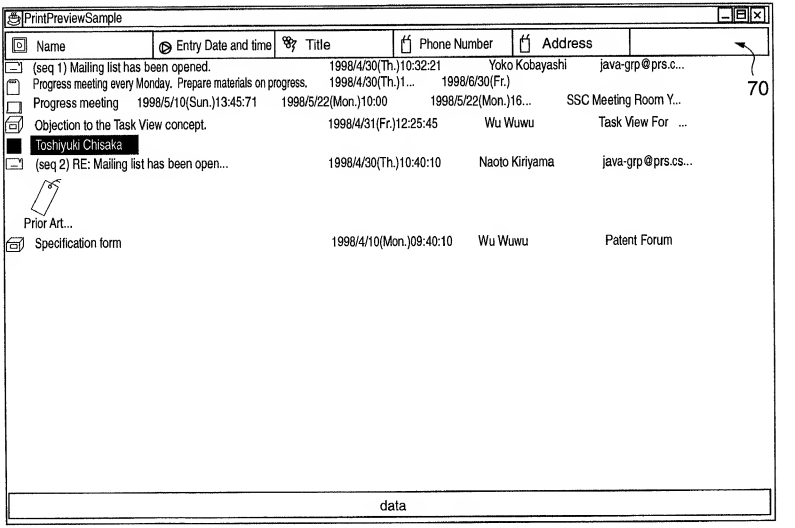

PrintPreviewSample
Name
Entry Date and time
Title
Phone Number
Address
(seq 1) Mailing list has been opened.
1998/4/30(Th.)10:32:21
Yoko Kobayashi
java-grp@prs.c...
Progress meeting every Monday. Prepare materials on progress.
1998/4/30(Th.)1...
1998/6/30(Fr.)
Progress meeting
1998/5/10(Sun.)13:45:71
1998/5/22(Mon.)10:00
1998/5/22(Mon.)16...
SSC Meeting Room Y...
Objection to the Task View concept.
1998/4/31(Fr.)12:25:45
Wu Wuwu
Task View For ...
Toshiyuki Chisaka
(seq 2) RE: Mailing list has been open...
1998/4/30(Th.)10:40:10
Naoto Kiriyama
java-grp@prs.cs...
Prior Art...
Specification form
1998/4/10(Mon.)09:40:10
Wu Wuwu
Patent Forum
data
70

FIG. 21

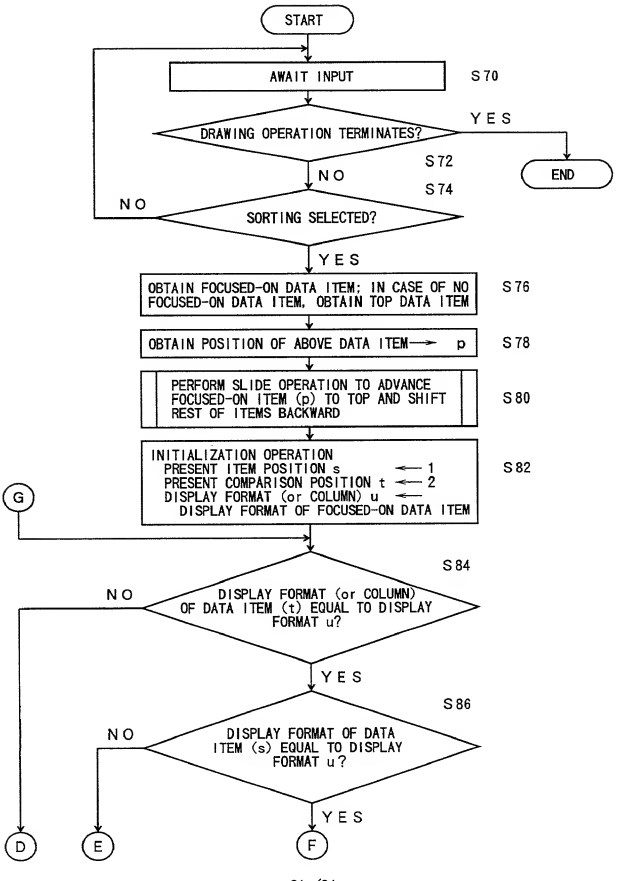

START
AWAIT INPUT
S70
DRAWING OPERATION TERMINATES?
YES
END
S72
NO
S74
NO
SORTING SELECTED?
YES
OBTAIN FOCUSED-ON DATA ITEM: IN CASE OF NO FOCUSED-ON DATA ITEM, OBTAIN TOP DATA ITEM
S76
OBTAIN POSITION OF ABOVE DATA ITEM → p
S78
PERFORM SLIDE OPERATION TO ADVANCE FOCUSED-ON ITEM (p) TO TOP AND SHIFT REST OF ITEMS BACKWARD
S80
INITIALIZATION OPERATION
PRESENT ITEM POSITION s ← 1
PRESENT COMPARISON POSITION t ← 2
DISPLAY FORMAT (or COLUMN) u ←
DISPLAY FORMAT OF FOCUSED-ON DATA ITEM
S82
G
S84
NO
DISPLAY FORMAT (or COLUMN) OF DATA ITEM (t) EQUAL TO DISPLAY FORMAT u?
YES
S86
NO
DISPLAY FORMAT OF DATA ITEM (s) EQUAL TO DISPLAY FORMAT u?
YES
D
E
F

FIG. 22

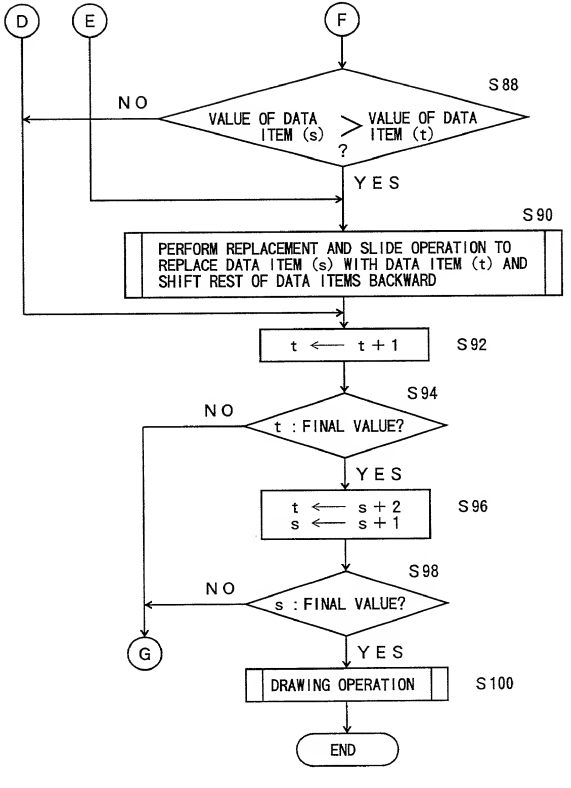

D
E
F
S88
NO
VALUE OF DATA ITEM (s) > VALUE OF DATA ITEM (t) ?
YES
S90
PERFORM REPLACEMENT AND SLIDE OPERATION TO REPLACE DATA ITEM (s) WITH DATA ITEM (t) AND SHIFT REST OF DATA ITEMS BACKWARD
t ⟵ t + 1
S92
S94
NO
t : FINAL VALUE?
YES
t ⟵ s + 2
s ⟵ s + 1
S96
S98
NO
s : FINAL VALUE?
G
YES
DRAWING OPERATION
S100
END

FIG. 23

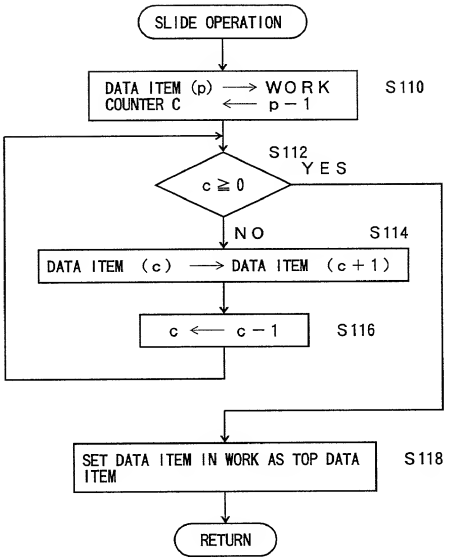

SLIDE OPERATION
DATA ITEM (p) ⟶ WORK
COUNTER C ⟵ p − 1
S110
S112
c ≧ 0
YES
NO
S114
DATA ITEM (c) ⟶ DATA ITEM (c + 1)
c ⟵ c − 1
S116
SET DATA ITEM IN WORK AS TOP DATA ITEM
S118
RETURN

FIG. 24

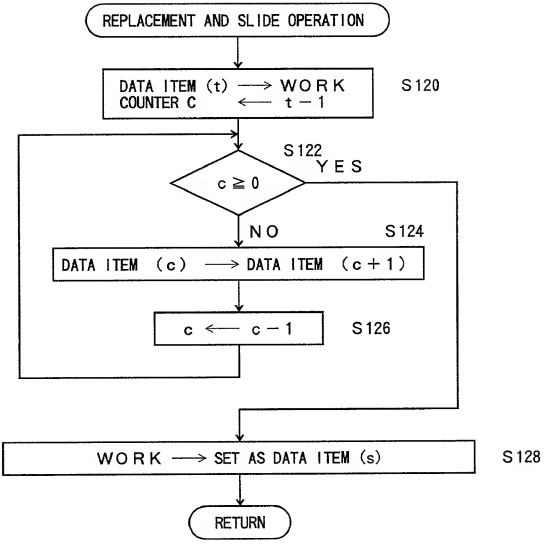

REPLACEMENT AND SLIDE OPERATION
DATA ITEM (t) ⟶ WORK
COUNTER C ⟵ t − 1
S120
S122
YES
c ≧ 0
NO
S124
DATA ITEM (c) ⟶ DATA ITEM (c + 1)
c ⟵ c − 1
S126
WORK ⟶ SET AS DATA ITEM (s)
S128
RETURN

FIG.25

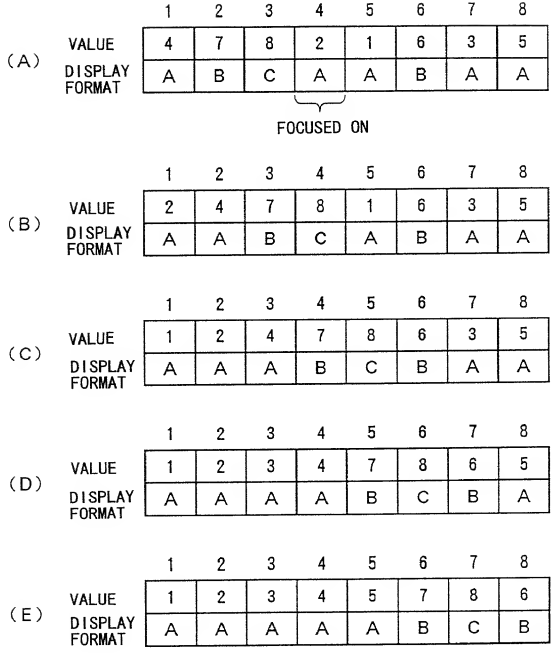

(A)
VALUE
DISPLAY FORMAT
1 2 3 4 5 6 7 8
4 7 8 2 1 6 3 5
A B C A A B A A
FOCUSED ON
(B)
VALUE
DISPLAY FORMAT
1 2 3 4 5 6 7 8
2 4 7 8 1 6 3 5
A A B C A B A A
(C)
VALUE
DISPLAY FORMAT
1 2 3 4 5 6 7 8
1 2 4 7 8 6 3 5
A A A B C B A A
(D)
VALUE
DISPLAY FORMAT
1 2 3 4 5 6 7 8
1 2 3 4 7 8 6 5
A A A A B C B A
(E)
VALUE
DISPLAY FORMAT
1 2 3 4 5 6 7 8
1 2 3 4 5 7 8 6
A A A A A B C B

FIG. 26

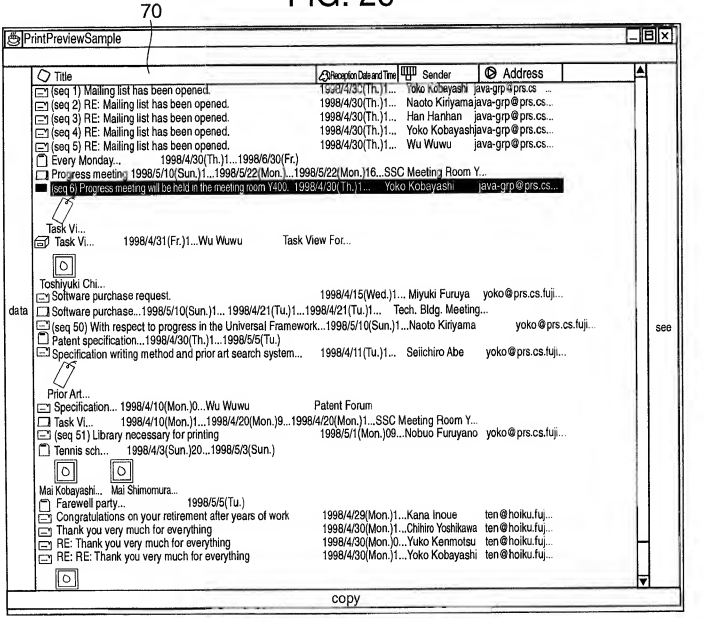

70
PrintPreviewSample
Title
Reception Date and Time
Sender
Address
(seq 1) Mailing list has been opened. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs ...
(seq 2) RE: Mailing list has been opened. 1998/4/30(Th.)1... Naoto Kiriyama java-grp@prs.cs...
(seq 3) RE: Mailing list has been opened. 1998/4/30(Th.)1... Han Hanhan java-grp@prs.cs...
(seq 4) RE: Mailing list has been opened. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs...
(seq 5) RE: Mailing list has been opened. 1998/4/30(Th.)1... Wu Wuwu java-grp@prs.cs...
Every Monday... 1998/4/30(Th.)1...1998/6/30(Fr.)
Progress meeting 1998/5/10(Sun.)1...1998/5/22(Mon.)...1998/5/22(Mon.)16...SSC Meeting Room Y...
(seq 6) Progress meeting will be held in the meeting room Y400. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs...
Task Vi...
Task Vi... 1998/4/31(Fr.)1...Wu Wuwu Task View For...
Toshiyuki Chi...
Software purchase request. 1998/4/15(Wed.)1... Miyuki Furuya yoko@prs.cs.fuji...
Software purchase...1998/5/10(Sun.)1... 1998/4/21(Tu.)1...1998/4/21(Tu.)1... Tech. Bldg. Meeting...
(seq 50) With respect to progress in the Universal Framework...1998/5/10(Sun.)1...Naoto Kiriyama yoko@prs.cs.fuji...
Patent specification...1998/4/30(Th.)1...1998/5/5(Tu.)
Specification writing method and prior art search system... 1998/4/11(Tu.)1... Seiichiro Abe yoko@prs.cs.fuji...
Prior Art...
Specification... 1998/4/10(Mon.)0...Wu Wuwu Patent Forum
Task Vi... 1998/4/10(Mon.)1...1998/4/20(Mon.)9...1998/4/20(Mon.)1...SSC Meeting Room Y...
(seq 51) Library necessary for printing 1998/5/1(Mon.)09...Nobuo Furuyano yoko@prs.cs.fuji...
Tennis sch... 1998/4/3(Sun.)20...1998/5/3(Sun.)
Mai Kobayashi... Mai Shimomura...
Farewell party... 1998/5/5(Tu.)
Congratulations on your retirement after years of work 1998/4/29(Mon.)1...Kana Inoue ten@hoiku.fuj...
Thank you very much for everything 1998/4/30(Mon.)1...Chihiro Yoshikawa ten@hoiku.fuj...
RE: Thank you very much for everything 1998/4/30(Mon.)0...Yuko Kenmotsu ten@hoiku.fuj...
RE: RE: Thank you very much for everything 1998/4/30(Mon.)1...Yoko Kobayashi ten@hoiku.fuj...
data
see
copy

FIG. 27

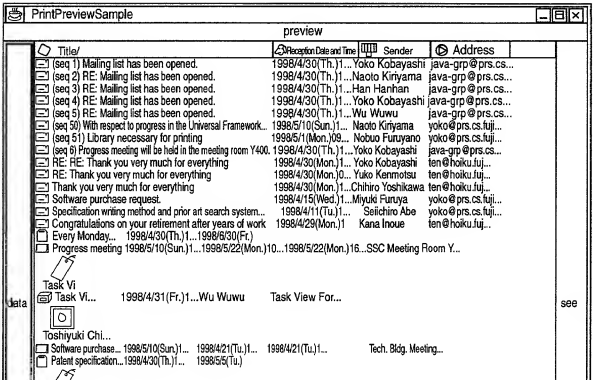

PrintPreviewSample
preview
Title/
Reception Date and Time
Sender
Address
(seq 1) Mailing list has been opened. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs...
(seq 2) RE: Mailing list has been opened. 1998/4/30(Th.)1... Naoto Kiriyama java-grp@prs.cs...
(seq 3) RE: Mailing list has been opened. 1998/4/30(Th.)1... Han Hanhan java-grp@prs.cs...
(seq 4) RE: Mailing list has been opened. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs...
(seq 5) RE: Mailing list has been opened. 1998/4/30(Th.)1... Wu Wuwu java-grp@prs.cs...
(seq 50) With respect to progress in the Universal Framework... 1998/5/10(Sun.)1... Naoto Kiriyama yoko@prs.cs.fuji...
(seq 51) Library necessary for printing 1998/5/1(Mon.)09... Nobuo Furuyano yoko@prs.cs.fuji...
(seq 9) Progress meeting will be held in the meeting room Y400. 1998/4/30(Th.)1... Yoko Kobayashi java-grp@prs.cs...
RE: RE: Thank you very much for everything 1998/4/30(Mon.)1... Yoko Kobayashi ten@hoiku.fuji...
RE: Thank you very much for everything 1998/4/30(Mon.)0... Yuko Kenmotsu ten@hoiku.fuji...
Thank you very much for everything 1998/4/30(Mon.)1...Chihiro Yoshikawa ten@hoiku.fuji...
Software purchase request. 1998/4/15(Wed.)1...Miyuki Furuya yoko@prs.cs.fuji...
Specification writing method and prior art search system... 1998/4/11(Tu.)1... Seiichiro Abe yoko@prs.cs.fuji...
Congratulations on your retirement after years of work 1998/4/29(Mon.)1 Kana Inoue ten@hoiku.fuji...
Every Monday... 1998/4/30(Th.)1...1998/6/30(Fr.)
Progress meeting 1998/5/10(Sun.)1...1999/5/22(Mon.)10...1998/5/22(Mon.)16...SSC Meeting Room Y...
Task Vi
Task Vi... 1998/4/31(Fr.)1...Wu Wuwu Task View For...
Toshiyuki Chi...
Software purchase... 1998/5/10(Sun.)1... 1998/4/21(Tu.)1... 1998/4/21(Tu.)1... Tech. Bldg. Meeting...
Patent specification...1998/4/30(Th.)1... 1998/5/5(Tu.)
Prior Art...
Specification...1998/4/10(Mon.)0... Wu Wuwu Patent Forum
Task Vi... 1998/4/10(Mon.)1... 1998/4/20(Mon.)9...1998/4/20(Mon.)1... SSC Meeting Room Y...
Tennis sch... 1998/4/3(Sun.)20... 1998/5/3(Sun.)
Mai Kobayashi... Mai Shimomura...
Farewell party... 1998/5/5(Tu.)
Ogawa Flower...
Ms. Song and Flower... 1998/4/24(Mon.)1...1998/4/25(Sun.)2...1998/4/25(Sun.)2...Takashimaya Yokohama
data
see
copy

FIG. 28

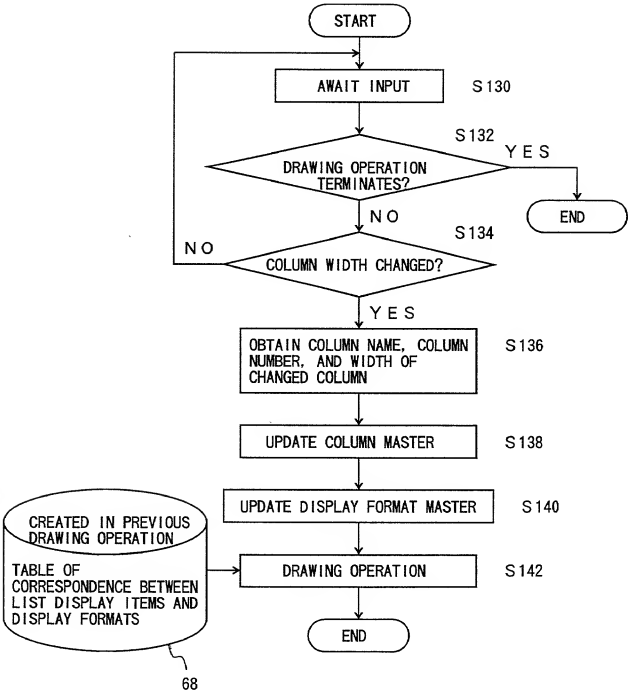

START
AWAIT INPUT
S130
S132
DRAWING OPERATION TERMINATES?
YES
END
NO
S134
NO
COLUMN WIDTH CHANGED?
YES
OBTAIN COLUMN NAME, COLUMN NUMBER, AND WIDTH OF CHANGED COLUMN
S136
UPDATE COLUMN MASTER
S138
UPDATE DISPLAY FORMAT MASTER
S140
DRAWING OPERATION
S142
END
CREATED IN PREVIOUS DRAWING OPERATION
TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS
68

FIG. 29

(A) LIST DISPLAY ITEMS

ATTRIBUTE	FIRST ITEM	SECOND ITEM	THIRD ITEM	FOURTH ITEM	FIFTH ITEM
MAIL	(seq 1) Mailing list has been opened.	1998/4/30(Th.)10:32:21	Yoko Kobayashi	java-grp@prs.cs.fujitsu.co.jp	Read
TO DO	Progress meeting every Monday. Prepare materials on progress	1998/4/30(Th.)11:42:41	1998/6/30(Fr.)		
CALENDAR	Progress meeting	1998/5/10(Sun.)13:45:71	1998/5/22(Mon.)10:00	1998/5/22(Mon.)16:00	SSC Meeting Room
FORUM	Objection to the Task View concept.	1998/4/31(Fr.)12:25:45	Wu Wuwu	TaskView Forum	
ADDRESS	Toshiyuki Chisaka	1998/4/20(Mon.)16:30:10	7128-4335	Project Monager,MW Third Development Dept.	Shinmaruko1-1-1
MAIL	(seq 2) RE: Mailing list has been opened.	1998/4/30(Th.)10:40:10	Naoto Kiriyama	java-grp@prs.cs.fujitsu.co.jp	Unread
MEMO	Storage area of prior art search system	1998/4/30(Th.)11:25:45			
FORUM	Specification form	1997/12/10(Mon.)09:40:10	Wu Wuwu	Patent Forum	

(B)

CONTENT ITEM
To the members of the Korean Food Research Project: Mailing list has been opened. Let's use it. ¥n KOBAYASHI
Prepare materials on progress as the progress meeting is held every Monday.
A meeting room for the progress meeting has been reserved. Please attend the meeting.
I do not understand some part of the Task View basic concept, so please give me a comment.
Manager working on the fourth floor of the SSC Building.
OK. Thank you for your mail. ¥nBy KIRIYAMA
Please check ¥¥KOUTI of the server.
I have made a specification.

FIG. 30

(A) DISPLAY FORMAT MASTER

DISPLAY FORMAT NAME	DISPLAY METHOD	ICON NO.	COLUMN	FONT	FONT SIZE	FONT COLOR	CONTENT DISPLAY
MAIL FORMAT 1	DETAILS	1	MAIL COLUMN	MINCHO/BOLD	16	BLACK	NO
MAIL FORMAT 2	DETAILS	1	MAIL COLUMN	MINCHO/BOLD	11	BLACK	YES
TO DO FORMAT	DETAILS	2	TO DO COLUMN	GOTHIC	11	BLUE	NO
CALENDAR FORMAT	DETAILS	3	CALENDAR COLUMN	Times New Roman	11	BLACK	NO
FORUM FORMAT1	DETAILS	4	FORUM COLUMN	GOTHIC	22	BLACK	NO
FORUM FORMAT2	LIST	15	FORUM COLUMN	GOTHIC	11	BLACK	NO
MEMO FORMAT	LARGE ICONS	6	MEMO COLUMN	GOTHIC	11	BLACK	NO
ADDRESS FORMAT	SMALL ICONS	5	ADDRESS COLUMN	Courier New	11	BLACK	NO

(B)

DISPLAY CONDITIONS	AREA SIZE OF DATA ITEM
ATTRIBUTE=MAIL AND STATE=READ	H20XW1000
ATTRIBUTE=MAIL AND STATE=UNREAD	H50XW1500
ATTRIBUTE=TO DO	H20XW800
ATTRIBUTE=CALENDAR	H20XW1300
ATTRIBUTE=FORUM AND WRITING TIME≧1998/1/1	H20XW1150
ATTRIBUTE=FORUM AND WRITING TIME<1998/1/1	H20XW1150
ATTRIBUTE=MEMO	H60XW60
ATTRIBUTE=ADDRESS	H20XW200

FIG. 31

COLUMN MASTER

COLUMN NAME	FIRST COLUMN			SECOND COLUMN			THIRD COLUMN			FOURTH COLUMN			FIFTH COLUMN		
	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH	ICON NO.	HEADING	WIDTH
MAIL COLUMN	7	TITLE	400	15	RECEPTION DATE AND TIME	200	10	SENDER	200	NONE	ADDRESS	200			
TO DO COLUMN	2	SCHEDULE	400	12	WRITING DATE AND TIME	200	NONE	EXPECTED COMPLETION DATE	200						
CALENDAR COLUMN	9	HEADING	400	12	WRITING DATE AND TIME	200	8	START TIME	250	8	FINISH TIME	250	13	PLACE	200
FORUM COLUMN	4	HEADING	400	12	WRITING TIME	200	10	SENDER	200	11	FORUM NAME	350			
MEMO COLUMN	6	MEMO	400	12	WRITING DATE AND TIME	200									
ADDRESS COLUMN	5	NAME	200	12	ENTRY DATE AND TIME	200	13	ATTRIBUTE	200	15	PHONE NUMBER	200	16	ADDRESS	200

FIG.32

ICON MASTER

ICON NO.	ICON NAME
1	Mail
2	TODO
3	Calendar
4	Forum
5	Address
6	Memo
7	Subject
8	Watch
9	Bord
10	Human
11	Desk
12	Clock
13	Place
14	Name
15	Horse
16	Dog

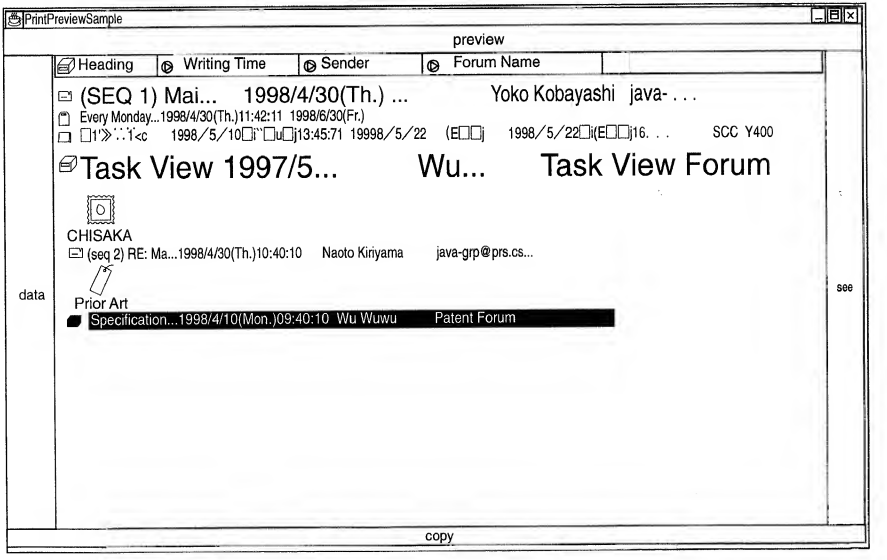
FIG. 33

(A) TABLE OF CORRESPONDENCE BETWEEN LIST DISPLAY ITEMS AND DISPLAY FORMATS

ATTRIBUTE	FIRST ITEM	SECOND ITEM	THIRD ITEM	FOURTH ITEM	FIFTH ITEM
MAIL	(seq 1) Mailing list has been opened.	1998/4/30(Th.)10:32:21	Yoko Kobayashi	java-grp@prs.cs.fujitsu.co.jp	Read
TO DO	Progress meeting every Monday. Prepare materials on progress	1998/4/30(Th.)11:42:11	1998/6/30(Fr.)		
CALENDAR	Progress meeting	1998/5/10(Sun.)13:45:71	1998/5/22(Mon.)10:00	1998/5/22(Mon.)16:00	SSC Meeting Room
FORUM	Objection to the Task View concept.	1998/4/31(Fr.)12:25:45	Wu Wuwu	TaskView Forum	
ADDRESS	Toshiyuki Chisaka	1998/4/20(Mon.)16:30:10	7128-4335	Project Monager,MW Third Development Dept.	Shinmaruko1-1-1
MAIL	(seq 2) RE: Mailing list has been opened.	1998/4/30(Th.)10:40:10	Naoto Kiriyama	java-grp@prs.cs.fujitsu.co.jp	Unread
MEMO	Storage area of prior art search system	1998/4/30(Th.)11:25:45			
FORUM	Specification form	1997/12/10(Mon.)09:40:10	Wu Wuwu	Patent Forum	

(B)

CONTENT ITEM	DISPLAY FORMAT NAME
To the members of the Korean Food Research Project: Mailing list has been opened. Let's use it. ¥nYOKO KOBAYASHI	MAIL FORMAT 1
Prepare materials on progress as the progress meeting is held every Monday.	TO DO FORMAT
A meeting room for the progress meeting has been reserved. Please attend the meeting.	CALENDAR FORMAT
I do not understand some part of the Task View basic concept, so please give me a comment.	FORUM FORMAT1
Manager working on the fourth floor of the SSC Building.	ADDRESS FORMAT
OK. Thank you for your mail. ¥nBy KIRIYAMA	MAIL FORMAT2
Please check ¥¥KOUTI of the server.	MEMO FORMAT
I have made a specification.	FORUM FORMAT2

FIG. 34

GIF IMAGE 843X527 PIXELS